WHAT IS CLAIMED IS:

1. A stall detection circuit for a stepper motor, said circuit having an H-bridge construction in which current alternatingly flows from a first switch through first and second coils to a fourth switch, and then from a second switch through the second and first coils to a third switch, said stall detection circuit comprising an additional circuit pathway from ground to a point between the first and second coils, said additional circuit pathway conveying current away from the second coil during a monitoring phase between step sequences when the first switch is closed and the fourth switch is open, said second coil during said monitoring phase detecting the back electromotive force generated by the motor in order to determine rotor condition.

2. The stall detection circuit as set forth in claim 1, wherein said additional circuit pathway includes a fifth switch and a resistor.

3. The stall detection circuit as set forth in claim 2, wherein a resistance level of said resistor is approximately equal to a resistance level of said second coil.

4. The stall detection circuit as set forth in claim 1, wherein said additional circuit pathway includes a resistor.

5. The stall detection circuit as set forth in claim 4, wherein a resistance level of said resistor is a few orders of magnitude larger than a resistance level of said second coil.

6. The stall detection circuit as set forth in claim 4, further comprising a diode in parallel with said resistor.

7. A stall detection circuit for a stepper motor, said circuit comprising an H-bridge construction in which current alternatingly flows from a first switch through first and second coils to a fourth switch, and then from a second switch through the second and first coils to a third switch, said circuit including an additional circuit pathway from ground to a point between the first and second coils, said additional circuit pathway including a resistor so that steady state current diverting to said pathway is low, said pathway, during a monitoring phase when the first switch is closed and the fourth switch is open, acting to convey current from the first coil to ground and thereby allow the second coil to detect back electromotive force generated by the motor in order to determine rotor condition.

8. The stall detection circuit as set forth in claim 7, wherein said additional circuit pathway includes a fifth switch between the resistor and ground, said fifth switch being closed a

few microseconds before said fourth switch is opened during said monitoring phase.

9. The stall detection circuit as set forth in claim 8, wherein a resistance level of said resistor is approximately equal to a resistance level of said second coil.

10. The stall detection circuit as set forth in claim 7, wherein a resistance level of said resistor is a few orders of magnitude larger than a resistance level of said second coil.

11. The stall detection circuit as set forth in claim 10, further comprising a diode in parallel with said resistor.

12. The stall detection circuit as set forth in claim 7, further comprising a diode in parallel with said resistor.

13. A method of detecting a stepper motor operating condition using a stall detection circuit with a generally H-bridge construction in which current alternatingly flows from a first switch through first and second coils to a fourth switch, and then from a second switch through the second and first coils to a third switch, said circuit further including an additional circuit pathway to ground connected at a point between said first and

second coils, the method comprising the steps of:

driving current from the first switch to the fourth switch through the first and second coils;

opening said fourth switch while said first switch remains closed so as to divert said current after said first coil to said additional circuit pathway;

extinguishing residual current in said second coil;

detecting with said second coil a back electromotive force generated by said motor as a sense voltage; and

determining from said sense voltage the motor operating condition.

14. The method as set forth in claim 13, wherein said additional circuit pathway includes a fifth switch and the method includes the step of closing the fifth switch a few microseconds before the step of opening said fourth switch.

15. The method as set forth in claim 14, wherein said method includes the step of including a resistor on said additional circuit pathway prior to said fifth switch, said resistor having a resistance value approximately equal to a resistance value of said second coil.